**TABLE M.5.6.1.2–6. — *National Ignition Facility Accident Frequency and Risk (Unfavorable Meteorology)***

| Accident | Frequency (per year) | MEI Dose (rem) | LCFs [b] | Offsite Population [a] Dose (person-rem) | LCFs [c] | Individual Noninvolved Worker Dose (rem) | LCFs [b] | Noninvolved Worker Population Dose (person-rem) | LCFs [c] |
|---|---|---|---|---|---|---|---|---|---|
| Earthquake during No Action Alternative operations | $2.00 \times 10^{-8}$ | $1.23 \times 10^{-10}$ | $7.38 \times 10^{-14}$ | $6.10 \times 10^{-8}$ | $3.66 \times 10^{-11}$ | $2.67 \times 10^{-10}$ | $1.60 \times 10^{-13}$ | $4.44 \times 10^{-8}$ | $2.66 \times 10^{-11}$ |
| Earthquake during depleted uranium shot | $2.00 \times 10^{-9}$ | $2.19 \times 10^{-11}$ | $1.31 \times 10^{-14}$ | $9.02 \times 10^{-9}$ | $5.41 \times 10^{-12}$ | $4.51 \times 10^{-11}$ | $2.71 \times 10^{-14}$ | $7.48 \times 10^{-9}$ | $4.49 \times 10^{-12}$ |
| Earthquake during highly enriched uranium shot | $2.00 \times 10^{-9}$ | $2.28 \times 10^{-11}$ | $1.37 \times 10^{-14}$ | $9.34 \times 10^{-9}$ | $5.61 \times 10^{-12}$ | $4.66 \times 10^{-11}$ | $2.80 \times 10^{-14}$ | $7.66 \times 10^{-9}$ | $4.60 \times 10^{-12}$ |
| Earthquake during thorium shot | $2.00 \times 10^{-9}$ | $2.29 \times 10^{-11}$ | $1.37 \times 10^{-14}$ | $9.52 \times 10^{-9}$ | $5.71 \times 10^{-12}$ | $4.62 \times 10^{-11}$ | $2.77 \times 10^{-14}$ | $8.20 \times 10^{-9}$ | $4.92 \times 10^{-12}$ |
| Earthquake during tracer shot | $2.00 \times 10^{-9}$ | $1.40 \times 10^{-11}$ | $8.42 \times 10^{-15}$ | $6.52 \times 10^{-9}$ | $3.91 \times 10^{-12}$ | $3.05 \times 10^{-11}$ | $1.83 \times 10^{-14}$ | $4.88 \times 10^{-9}$ | $2.93 \times 10^{-12}$ |
| Earthquake during plutonium without yield shot | $2.00 \times 10^{-9}$ | $4.33 \times 10^{-11}$ | $2.60 \times 10^{-14}$ | $1.67 \times 10^{-8}$ | $1.00 \times 10^{-11}$ | $9.39 \times 10^{-11}$ | $5.63 \times 10^{-14}$ | $1.65 \times 10^{-8}$ | $9.88 \times 10^{-12}$ |
| Earthquake during plutonium with yield shot | $2.00 \times 10^{-9}$ | $2.32 \times 10^{-11}$ | $1.39 \times 10^{-14}$ | $9.96 \times 10^{-9}$ | $5.98 \times 10^{-12}$ | $5.01 \times 10^{-11}$ | $3.01 \times 10^{-14}$ | $8.54 \times 10^{-9}$ | $5.12 \times 10^{-12}$ |

Source: LLNL 2003d.

[a] Based on the population of approximately 6,900,000 persons residing within 50 miles of LLNL.

[b] Increased likelihood of a latent cancer fatality.

[c] Increased number of latent cancer fatalities.

LCFs = latent cancer fatalities; MEI = maximally exposed individual.